

# Ariya Sangwongwanich

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3634439/publications.pdf>

Version: 2024-02-01

93  
papers

2,474  
citations

331670

21  
h-index

345221

36  
g-index

95  
all docs

95  
docs citations

95  
times ranked

1505  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Performance Constant Power Generation in Grid-Connected PV Systems. IEEE Transactions on Power Electronics, 2016, 31, 1822-1825.	7.9	208
2	A Comprehensive Review on Supercapacitor Applications and Developments. Energies, 2022, 15, 674.	3.1	161
3	Lifetime Evaluation of Grid-Connected PV Inverters Considering Panel Degradation Rates and Installation Sites. IEEE Transactions on Power Electronics, 2018, 33, 1225-1236.	7.9	152
4	A Sensorless Power Reserve Control Strategy for Two-Stage Grid-Connected PV Systems. IEEE Transactions on Power Electronics, 2017, 32, 8559-8569.	7.9	142
5	Delta Power Control Strategy for Multistring Grid-Connected PV Inverters. IEEE Transactions on Industry Applications, 2017, 53, 3862-3870.	4.9	117
6	Design for Reliability of Power Electronics for Grid-Connected Photovoltaic Systems. CPSS Transactions on Power Electronics and Applications, 2016, 1, 92-103.	4.4	106
7	Mitigation of Interharmonics in PV Systems With Maximum Power Point Tracking Modification. IEEE Transactions on Power Electronics, 2019, 34, 8279-8282.	7.9	101
8	Benchmarking of Constant Power Generation Strategies for Single-Phase Grid-Connected Photovoltaic Systems. IEEE Transactions on Industry Applications, 2018, 54, 447-457.	4.9	96
9	On the Impacts of PV Array Sizing on the Inverter Reliability and Lifetime. IEEE Transactions on Industry Applications, 2018, 54, 3656-3667.	4.9	95
10	An Adaptive Control Scheme for Flexible Power Point Tracking in Photovoltaic Systems. IEEE Transactions on Power Electronics, 2019, 34, 5451-5463.	7.9	93
11	Extended Functionalities of Photovoltaic Systems With Flexible Power Point Tracking: Recent Advances. IEEE Transactions on Power Electronics, 2020, 35, 9342-9356.	7.9	91
12	Analysis and Modeling of Interharmonics From Grid-Connected Photovoltaic Systems. IEEE Transactions on Power Electronics, 2018, 33, 8353-8364.	7.9	83
13	Mission Profile-Oriented Control for Reliability and Lifetime of Photovoltaic Inverters. IEEE Transactions on Industry Applications, 2020, 56, 601-610.	4.9	58
14	Reliability aspects in microgrid design and planning: Status and power electronics-induced challenges. Renewable and Sustainable Energy Reviews, 2022, 159, 112127.	16.4	58
15	Reliability Evaluation of PV Systems with Integrated Battery Energy Storage Systems: DC-Coupled and AC-Coupled Configurations. Electronics (Switzerland), 2019, 8, 1059.	3.1	40
16	Design for Reliability of Power Electronic Systems. , 2018, , 1423-1440.		38
17	Development of flexible active power control strategies for grid-connected photovoltaic inverters by modifying MPPT algorithms. , 2017, , .		37
18	Enhancing PV Inverter Reliability With Battery System Control Strategy. CPSS Transactions on Power Electronics and Applications, 2018, 3, 93-101.	4.4	36

#	ARTICLE	IF	CITATIONS
19	The Impact of PV Panel Positioning and Degradation on the PV Inverter Lifetime and Reliability. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 3114-3126.	5.4	34
20	Grid-friendly power control for smart photovoltaic systems. Solar Energy, 2020, 210, 115-127.	6.1	32
21	Pursuing Photovoltaic Cost-Effectiveness: Absolute Active Power Control Offers Hope in Single-Phase PV Systems. IEEE Industry Applications Magazine, 2017, 23, 40-49.	0.4	31
22	A cost-effective power ramp-rate control strategy for single-phase two-stage grid-connected photovoltaic systems. , 2016, , .		30
23	An Overview of Photovoltaic Microinverters: Topology, Efficiency, and Reliability. , 2019, , .		28
24	Monte Carlo Simulation With Incremental Damage for Reliability Assessment of Power Electronics. IEEE Transactions on Power Electronics, 2021, 36, 7366-7371.	7.9	27
25	Implementation of fault tolerant control for modular multilevel converter using EtherCAT communication. , 2015, , .		26
26	Lifetime Evaluation of Three-Level Inverters for 1500-V Photovoltaic Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4285-4298.	5.4	26
27	Interharmonics from grid-connected PV systems: Mechanism and mitigation. , 2017, , .		23
28	A Phase-Shifting MPPT to Mitigate Interharmonics From Cascaded H-Bridge PV Inverters. IEEE Transactions on Industry Applications, 2021, 57, 3052-3063.	4.9	22
29	Monte Carlo-Based Reliability Estimation Methods for Power Devices in Power Electronics Systems. IEEE Open Journal of Power Electronics, 2021, 2, 523-534.	5.7	20
30	An Analysis of Multi Objective Energy Scheduling in PV-BESS System Under Prediction Uncertainty. IEEE Transactions on Energy Conversion, 2021, 36, 2276-2286.	5.2	19
31	Benchmarking of constant power generation strategies for single-phase grid-connected Photovoltaic systems. , 2016, , .		18
32	Grid Congestion Mitigation and Battery Degradation Minimisation Using Model Predictive Control in PV-Based Microgrid. IEEE Transactions on Energy Conversion, 2021, 36, 1500-1509.	5.2	18
33	Design and Implementation of a Single-Source 17-Level Inverter for a Single-Phase Transformer-Less Grid-Connected Photovoltaic Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 4469-4485.	5.4	18
34	Neutral Point Voltage Balancing Control Based on Adjusting Application Times of Redundant Vectors for Three-Level NPC Inverter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 5604-5613.	5.4	18
35	Performance comparison of phase shifted PWM and sorting method for modular multilevel converters. , 2015, , .		17
36	A Dual-Loop Control to Ensure Fast and Stable Fault-Tolerant Operation of Series Resonant DAB Converters. IEEE Transactions on Power Electronics, 2020, 35, 10994-11012.	7.9	17

#	ARTICLE	IF	CITATIONS
37	Distributed Control of Islanded Series PV-Battery-Hybrid Systems With Low Communication Burden. IEEE Transactions on Power Electronics, 2021, 36, 10199-10213.	7.9	17
38	Sensorless reserved power control strategy for two-stage grid-connected Photovoltaic systems. , 2016, , .		16
39	Low voltage ride-through of two-stage grid-connected photovoltaic systems through the inherent linear power-voltage characteristic. , 2017, , .		15
40	Impacts of PV array sizing on PV inverter lifetime and reliability. , 2017, , .		14
41	Design for Accelerated Testing of DC-Link Capacitors in Photovoltaic Inverters Based on Mission Profiles. IEEE Transactions on Industry Applications, 2021, 57, 741-753.	4.9	14
42	Reliability analysis of battery energy storage system for various stationary applications. Journal of Energy Storage, 2022, 50, 104217.	8.1	14
43	Two-dimension sorting and selection algorithm featuring thermal balancing control for modular multilevel converters. , 2016, , .		12
44	Capacitor Selection Method in PV Interfaced Converter Suitable for Maximum Power Point Tracking. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 2136-2146.	5.4	11
45	Delta power control strategy for multi-string grid-connected PV inverters. , 2016, , .		10
46	Capacitor voltage balance performance comparison of MMC-STATCOM using NLC and PS-PWM strategies during negative sequence current injection. , 2016, , .		10
47	Reduced-Order Thermal Modeling for Photovoltaic Inverters Considering Mission Profile Dynamics. IEEE Open Journal of Power Electronics, 2020, 1, 407-419.	5.7	10
48	Incremental Degradation Estimation Method for Online Assessment of Battery Operation Cost. IEEE Transactions on Power Electronics, 2022, 37, 11497-11501.	7.9	10
49	Minimizing the levelized cost of energy in single-phase photovoltaic systems with an absolute active power control. , 2015, , .		9
50	Design for reliability in renewable energy systems. , 2017, , .		8
51	A general algorithm for flexible active power control of photovoltaic systems. , 2018, , .		8
52	A Systematic Approach for Lifetime Evaluation of PV-Battery Systems. , 2019, , .		8
53	Power electronic technologies for PV systems. , 2019, , 15-43.		8
54	Reliability of DC-link Capacitors in Three-Level NPC Inverters under different PWM Methods. , 2022, , .		8

#	ARTICLE	IF	CITATIONS
55	Thermal Performance Evaluation of 1500-VDC Photovoltaic Inverters Under Constant Power Generation Operation. , 2019, , .		7
56	A Phase-Shifting MPPT Method to Mitigate Interharmonics from Cascaded H-Bridge PV Inverters. , 2020, , .		7
57	Flexible Active Power Control of Distributed Photovoltaic Systems With Integrated Battery Using Series Converter Configurations. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 6891-6909.	5.4	7
58	Capacitor Voltage Balancing for Multilevel Dual-Active-Bridge DC-DC Converters. IEEE Transactions on Industrial Electronics, 2023, 70, 2566-2575.	7.9	7
59	Lifetime evaluation of PV inverters considering panel degradation rates and installation sites. , 2017, , .		6
60	Mission Profile-based Accelerated Testing of DC-link Capacitors in Photovoltaic Inverters. , 2019, , .		6
61	A Comparative Study of Flexible Power Point Tracking Algorithms in Photovoltaic Systems. , 2019, , .		6
62	Lifetime Evaluation of Power Modules for Three-Level 1500-V Photovoltaic Inverters. , 2020, , .		6
63	Flexible Power Control of Photovoltaic Systems. , 2018, , 207-229.		5
64	Reliability Assessment of PV Inverters with Battery Systems Considering PV Self-Consumption and Battery Sizing. , 2018, , .		5
65	Lifetime Estimation and Reliability of PV Inverter With Multi-Timescale Thermal Stress Analysis. , 2019, , .		5
66	Interharmonics Reduction in Photovoltaic Systems with Random Sampling MPPT Technique. , 2019, , .		5
67	Enhanced Reliability of 1500-V Photovoltaic Inverters with Junction Temperature Limit Control. , 2021, , .		5
68	A Series Interharmonic Filter for Cascaded H-bridge PV Inverters. , 2020, , .		5
69	Effects of PV Panel and Battery Degradation on PV-Battery System Performance and Economic Profitability. , 2020, , .		4
70	Flexible Power Control of Distributed Grid-Connected Series-Photovoltaic-Battery Systems. , 2021, , .		4
71	Reliability Analysis and Energy Yield of String-Inverter Considering Monofacial and Bifacial Photovoltaic Panels. , 2020, , .		4
72	Monte Carlo Based Reliability Estimation Methods in Power Electronics. , 2020, , .		4

#	ARTICLE	IF	CITATIONS
73	The Impact of PV array Inclination on the PV Inverter Reliability and Lifetime. , 2020, , .		4
74	Wear-Out Failure Analysis of Solar Optiverter Operating with 60- and 72-Cell Si Crystalline PV Modules. , 2018, , .		3
75	Mission Profile-Oriented Control for Reliability and Lifetime of Photovoltaic Inverters. , 2018, , .		3
76	Flexible active power control of PV systems. , 2019, , 153-185.		3
77	Impact of Power Converters and Battery Lifetime on Return of Investment of Photovoltaic Systems. , 2020, , .		3
78	A Random Sampling-Rate MPPT Method to Mitigate Interharmonics from Cascaded H-Bridge Photovoltaic Inverters. , 2020, , .		3
79	Reliability Assessment of Fault-Tolerant Power Converters including Wear-Out Failure. , 2022, , .		3
80	Photovoltaic module characteristic influence on reliability of micro-inverters. , 2018, , .		2
81	Robustness Evaluation of PV-Battery Sizing Principle Under Mission Profile Variations. , 2020, , .		2
82	Reliability of DC-link Capacitors in Two-Stage Micro-Inverters Under Different PV Module Sizes. , 2019, , .		2
83	Impact of Mission Profile Dynamics on Accuracy of Thermal Stress Modeling in PV Inverters. , 2020, , .		2
84	Double-Carrier-Based PWM Theory for Independent Power Control of Dual-Input Three-level Inverters. , 2022, , .		2
85	Low-Frequency Oscillation Suppression in Series Resonant Dual-Active-Bridge Converters under Fault Tolerant Operation. , 2019, , .		1
86	Advanced power control of photovoltaic systems. , 2021, , 447-469.		1
87	Performance Comparison of PV Inverter Systems Considering System Voltage Ratings and Installation Sites. , 2021, , .		1
88	Online Optimization of Zero-Sequence Voltage Injection of PWM Strategy for 3L-NPC converters. , 2022, , .		1
89	Validation of Thermal Stress Modeling in PV Inverters under Mission Profile Operation. , 2020, , .		0
90	Advancing Grid-Connected Renewable Generation Systems. Applied Sciences (Switzerland), 2021, 11, 3058.	2.5	0

#	ARTICLE	IF	CITATIONS
91	Optimization of Reactive Power Distribution in Series PV-Battery-Hybrid Systems. , 2021, , .		0
92	Multi-Converter System Modelling in Cost for Reliability Studies. , 2021, , .		0
93	Long-Term Forecasting Method for Power Electronics-Based System Design. , 2022, , .		0